

# EUROPEAN PATENT OFFICE

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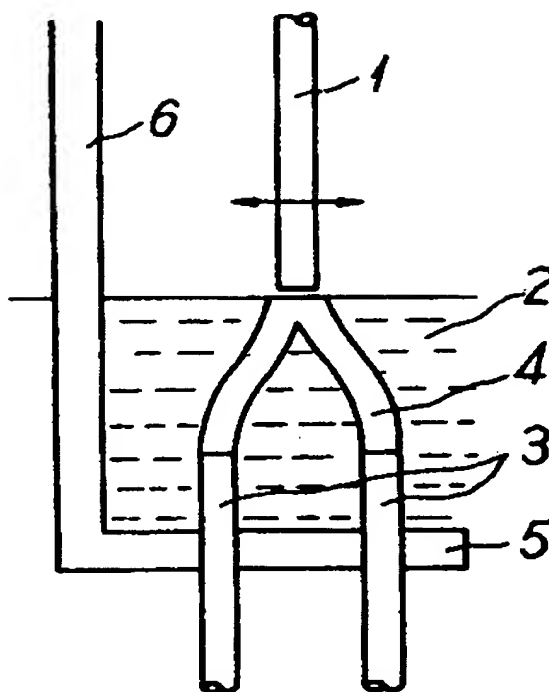
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TITLE : MANUFACTURE OF HIGH POLYMER  
PHOTOCONDUCTIVE PATH



ABSTRACT : PURPOSE: To manufacture a photoconductive path having an optional shape by irradiating the UV light past an optical fiber to the end face of the photoconductive path, sinking the optical fiber into a soln. mixture composed of a monomer, etc. and curing the monomer of the part irradiated with the light.

CONSTITUTION: Optical fibers 3 immersed in a liquid mixture 2 composed of a monomer, etc. are held by means of a supporting rod 6 and a holding part 5 attached to a mechanism for feeding vertically the fibers. The liquid mixture is mixed with a photosensitizer, crosslinking agent, high polymer and solvent according to need in addition to the monomer. After the end faces of the fibers 3 are set under the surface of the liquid mixture 2, UV light is irradiated through an optical fiber 1 to the core parts of the fibers 3. The fiber 1 is scanned to match the core part or superposed photoconductive path parts of the fibers 3 while the part 5 is gradually lowered. The photoconductive path having an optional shape is obtd. by controlling the movement of the fiber 1 in this stage. The top end of the fiber 1 is then immersed in the liquid mixture 2 and the UV light past the fiber 1 is irradiated to connect the same to the superposed photoconductive path parts.

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